What Is Claimed Is:

1. A package for housing a semiconductor chip comprising a substrate having on an upper surface thereof a mounting space where a semiconductor chip is to be mounted, a frame being provided so as to surround said mounting space on the upper surface of said substrate and having a joint for an input/output terminal on a side thereof, and an input/output terminal connected by fitting or joining to said joint, wherein said substrate, or part of said substrate, or said substrate and said frame, or part of said substrate and said frame is formed from a metal-diamond composite in which a matrix material having diamond particles joined via a metal carbide is infiltrated with a metal containing copper and/or silver as a main component.

2. A package for housing a semiconductor chip according to claim 1, wherein at least part of a surface of said metal-diamond composite is plated with gold.

3. A package for housing a semiconductor chip according to claim 1, wherein a screw mounting part that is a through hole or a notch is formed in each opposing side of said substrate.

4. A semiconductor device comprising a package for housing a semiconductor chip according to claim 1, a semiconductor chip mounted on and fixed to said mounting space, and a lid joined to an upper surface of said frame.

5. A package for housing a semiconductor chip comprising a substrate having on an upper surface thereof a mounting space where a semiconductor chip is to be

mounted, a frame being provided so as to surround said mounting space on the upper surface of said substrate and having a joint for an input/output terminal on a side thereof, and an input/output terminal connected by fitting or joining to said joint, wherein said substrate, or part of said substrate, or said substrate and said frame, or part of said substrate and said frame is formed from a metal-diamond sintered body having no pores inside thereof, diamond particles with a particle size of no less than 5 μm and no more than 100 μm as a main component, a balance being substantially copper, and a thermal conductivity of no less than 500 W/m·K and no more than 1500 W/m·K.

6. A package for housing a semiconductor chip according to claim 5, wherein at least part of a surface of said metal-diamond sintered body is plated with gold.

7. A package for housing a semiconductor chip according to claim 5, wherein a screw mounting part that is a through hole or a notch is formed in each opposing side of said substrate.

8. A semiconductor device comprising a package for housing a semiconductor chip according to claim 5, a semiconductor chip mounted on and fixed to said mounting space, and a lid joined to an upper surface of said frame.